

## WHAT IS CLAIMED IS:

## 1. A terminal comprising:

a sending unit which sends a request message for node information to a plurality of network nodes on a communication path;

a receiving unit which receives a response message including the node information from each of the network nodes which have received the request message;

a decision unit which decides on at least one of the plurality of the network nodes to be an active node according to the response message; and

an upload unit which uploads to the active node a program for performing a specific process on packets to be sent or received by the terminal.

2. The terminal of Claim 1, wherein the receiving unit receives information on a communication method of the node as the response message, and the decision unit decides on a wireless communication node to be the active node, and the upload unit uploads to the active node a program for performing a packet processing to conform to a wireless communication quality.

3. The terminal of Claim 1, wherein the receiving unit receives information on a processing load of the node as the

response message, and the decision unit decides on a node with a relatively light processing load to be the active node, and the upload unit uploads to the active node a program for controlling priority on the packets to be sent or received by the terminal.

4. The terminal of Claim 1, wherein the receiving unit receives information on a processing load of the node as the response message, and the decision unit decides on a node with a larger processing load than a predefined threshold to be the active node, and the upload unit uploads to the active node a program for performing a priority control on a packet processing according to a transmission quality requirement.

5. The terminal of Claim 1, wherein the receiving unit receives information on a processing capacity of the node as the response message, and the decision unit decides on a node with a smaller processing capacity than a predefined threshold to be the active node, and the upload unit uploads to the active node a program for performing a priority control on the packets to be sent or received by the terminal.

6. The terminal of Claim 1, wherein the receiving unit receives information on a relative location of the node from the terminal as the response message, and the decision unit decides on a node relatively close to the terminal to be the

active node, and the upload unit uploads to the active node a program for performing a priority control on the packets to be sent or received by the terminal.

7. A packet transmission apparatus comprising:

a decision unit which decides whether to be an active node for the terminal in receiving a decision request message for an active node from a terminal;

a receiving unit which receives from the terminal a program for performing a specific process on packets to be sent or received by the terminal when the decision unit decides to be an active node;

a storage which stores the received program; and

an execution unit which executes the stored program by incorporating the program into a packet processing.

8. The apparatus of Claim 7, wherein the decision unit decides to be an active node if the apparatus is a wireless access point for the terminal, and the execution unit executes a program for performing a process to conform to a wireless communication quality by incorporating the program into the packet processing.

9. The apparatus of Claim 7, wherein the decision unit decides to be an active node if the apparatus can meet a network quality requested by the terminal, and the execution

unit executes a program for performing a priority control on the packets to be sent or received by the terminal by incorporating the program into the packet processing.

10. The apparatus of Claim 7, wherein the decision unit decides to be an active node if the apparatus is at an end of a link with a low level of communication quality, and the execution unit executes a program for performing a retransmission control on packets on the link by incorporating the program into the packet processing.

11. A program placement method comprising:

collecting node information from a plurality of network nodes on a communication path of packets to be sent or received by a terminal;

deciding on at least one of the plurality of the network nodes to be an active node according to the collected node information; and

uploading to the active node a program for performing a specific process on packets to be sent or received by the terminal.

12. The method of Claim 11, wherein the collecting collects information on a communication method of the node, and the deciding decides on a wireless communication node to be the active node, and the uploading uploads to the active node a

program for performing a packet processing to conform to a wireless communication quality.

13. The method of Claim 11, wherein the collecting collects information on a processing load of the node, and the deciding decides on a node with a relatively light processing load to be the active node, and the uploading uploads to the active node a program for performing a priority control on the packets to be sent or received by the terminal.

14. The method of Claim 11, wherein the collecting collects information on a processing load of the node, and the deciding decides on a node with a larger processing load than a predefined threshold to be the active node, and the uploading uploads to the active node a program for performing a priority control on a packet processing according to a transmission quality requirement.

15. The method of Claim 11, wherein the collecting collects information on a processing capacity of the node, and the deciding decides on a node with a smaller processing capacity than a predefined threshold to be the active node, and the uploading uploads to the active node a program for performing a priority control on the packets to be sent or received by the terminal.

16. The terminal of Claim 11, wherein the collecting collects information on a relative location of the node from the terminal, and the deciding decides on a node relatively close to the terminal to be the active node, and the uploading uploads to the active node a program for performing a priority control on the packets to be sent or received by the terminal.

17. A program placement method comprising:

receiving requirement information on packet communication of a terminal at a node on a communication path of packets to be sent or received by the terminal;

deciding whether to be an active node for the terminal according to the requirement information; and

receiving from the terminal a program for performing a specific process on packets to be sent or received by the terminal and incorporating the received program into a packet processing if it is decided to be an active node.

18. The method of Claim 17, wherein the deciding decides to be the active node if the node is a wireless access point for the terminal, and the incorporating incorporates a program for performing a process to conform to a wireless communication quality into the packet processing.

19. The method of Claim 17, wherein the deciding decides to

be the active node if the node can meet a network quality requested by the terminal, and the incorporating incorporates a program for performing a priority control on the packets to be sent or received by the terminal into the packet processing.

20. The apparatus of Claim 17, wherein the deciding decides to be the active node if the node is at an end of a link with a low level of communication quality, and the incorporating incorporates a program for performing a retransmission control on packets on the link into the packet processing.